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Taking Europe Seriously: European Financialization and US Monetary Power

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Abstract

This article considers the link between the financialization of European banks and US monetary power. We focus first on the Global Financial Crisis of 2008-09 (GFC), arguing that crisis origins

should largely be located in European banks' financialization and their becoming a banker to both the US and the global US dollar-based offshore banking system. The interdependence between this system and the US economy constrained US monetary policy before the crisis, and forced the Federal Reserve to assume the Lender of Last Resort (LOLR) function for the entire offshore system, despite much of this system involving lending between non-US counterparties. European financialization caused reduced US monetary autonomy and therefore power. This article argues for greater attention in IPE to European financial developments in the GFC's implications. The importance of European banking has been maintained post-crisis and Europe has moved to a substantial surplus position, suggesting Europe's continued importance.

Economists' early interpretations of the 2007-9 financial crisis and its aftermath locate the United States as the crisis epicenter. They also appear to vindicate approaches to International Political Economy (IPE) that analytically privilege American monetary and financial power. Narratives of the crisis are conventionally marked by American developments from the bursting of the housing bubble to Lehman Brothers' bankruptcy (e.g., Roubini and Mihm, 2010). Structural accounts of the crisis' financial origins, meanwhile, started with flows moving across the Pacific (Corden, 2009; Ferguson, 2009; Obstfeld and Rogoff, 2009; Setser, 2008; Bernanke et al., 2011). These interpretations looked back to pre-crisis discussions of the 'global savings glut' (GSG) and its implications for American interest rates, housing prices, and global imbalances. The subsequent focus on the global demand for safe assets as key to explaining the crisis (Caballero and Krishnamurthy, 2008; Caballero, 2010;

Gorton, 2016) was developed from the GSG and global imbalances arguments (Acharya and Schnabl 2009). The problem, it was argued here, was an 'underlying structural deficit of safe assets' (Caballero, 2010, p. 6), which the US financial sector sought to meet through the financial engineering of 'pseudo-safe assets', AAA-rated securitizations of sub-prime mortgages (Caballero, Farhi and Gourinchas, 2017).

Even in the immediate aftermath of the crisis, an alternative approach emerged, focused on the activities of banks, at this stage in particular off-balance sheet Asset-Backed Commercial Paper ('ABCP'; Acharya and Schnabl 2009). This emphasis crystallized into the 'banking glut' explanation of the crisis (Shin 2011; McCauley 2018). The 'banking glut' accounts made the key explanatory variables regulation and banks' business activities. As a result, the geographic center of attention also shifted. For the GSG proponents, the Asian surplus countries, often essentially China, are central, albeit stable European (or German) surpluses were acknowledged (Bernanke 2005). The 'safe assets shortage' similarly recognized substantial European MBS purchases, including by investors in European countries without a current account surplus. Again, however, the explanatory variable lay elsewhere: 'the strong preference of the GSG countries for Treasuries and Agencies appears to have pushed Europeans and other advanced-economy investors...into apparently safe "private-label" MBS' (Bernanke *et al.*, 2011, p.3).¹ In contrast, for those making a banking glut the primary explanatory variable, Europe was central and the crisis transatlantic rather than transpacific (McCauley 2018).

It is important to emphasize that few explanations of the crisis seek to exclude the importance of alternative explanations entirely. The range of explanations is a continuum between the two extremes of empirical and geographic focus (with a potential third dimension for domestic US factors, as in Bernanke *et al.* (2011)). IPE's approach to the crisis can be seen on a similar continuum. Helleiner (2011), for example, is wary of the implied American 'passivity' in the GSG explanation. He does give attention to European regulatory developments, but insists that what was '[p]articularly important for the global system was the experience of the United States, which absorbed large amounts of capital before the crisis from various countries in Asia, Europe and the Middle East with large current accounts surpluses and high savings' (*ibid.*, p.77). He also argues that IPE is guilty of focusing too heavily on private actors; while '[s]ome of the foreign support [to the US] came from private investors

¹ Bernanke *et al.* see US investors as pushed in the same direction. McCauley (2018), in contrast, argues European investors bought riskier investments than their US counterparts.

from high-income countries with large current account surpluses, such as Germany and Japan', 'many of the key investors pumping foreign capital into the United States before 2007 were foreign governments' (*ibid.*, p.78). Thompson (2010) similarly privileged Asian official investment. Schwartz (2009) saw the US housing boom's raw materials in disinflation as a result of offshoring to Asia and US global financial arbitrage underpinned by 'European and Asian recycling of trade surpluses'. It does '*Subprime Nation*' a considerable disservice to reduce it to a point on a two-dimensional continuum, but it is closer to a GSG explanation than a 'banking glut' account. At the other end of the spectrum is McDowell (2012, 2017), whose analyses are in line with economists' 'banking glut' explanations.

This paper suggests that US-centric IPE accounts of the 2007-9 financial crisis miss the central role played by European banks, not least in how the Federal Reserve (Fed) became a selective international lender of last resort focused on Europe (LOLR) (Broz, 2015; McDowell, 2012; Steil, 2014). Empirically, it argues – while accepting no single explanation works – that European banks' internationalized operations and these banks' ability to intermediate dollar credit were central to the crisis' causal origins and dynamics. It then contends that the Fed was forced to become in the emergency LOLR, because of the consequences for the United States of the breakdown in offshore dollar intermediation in Europe. The article is supportive of the 'banking glut' explanation of the crisis, and some of McDowell's (2012 and 2017) arguments, visiting a number of similar empirical areas. We disagree, however, with McDowell in two areas: first, while McDowell (2012, p. 172) acknowledges that 'huge volumes of dollars are also lent outside the United States', we advocate greater focus on implications of the fact that the majority of offshore US dollar credit does not involve transactions with counterparties in the United States, and does involve European banks. More fundamentally, McDowell (2012) follows the majority view in IPE in seeing the Fed's LOLR role as an example of US structural power. Despite using very similar language as McDowell's (2017) view that the situation 'compelled' the Fed actions, we argue that the crisis demonstrates not maintained or enhanced US monetary power, but reduced policy autonomy and therefore reduced power. This reduced autonomy resulted from European financialization, and IPE scholarship has, we argue, yet to confront its full implications.

The first section considers the claims in the literature about the 2007-9 financial crisis' locational origins, making a general argument for European financialization's centrality. The second section

makes a more detailed empirical case for this claim through an analysis of European banks. The third section shows the ways in which both offshore dollar intermediation in Europe and European states' post-2007 dependency on the Fed proved a constraint on American monetary autonomy. The fourth section argues that post-crisis Europe has remained a banker to the world while also increasingly becoming a creditor, thereby justifying a continued focus on Europe. The final section draws some conclusions for IPE.

1. Theorizing financialization and the financial crisis

The 2007-9 financial crisis appears, as van der Zwan (2014, p. 100) argues, to have vindicated the conceptual paradigm of financialization. The massive disruption in bank credit markets that began in August 2007 had global consequences reaching far beyond the international financial system. This judgment leaves, however, open the question of which states shaped the crisis-causing aspects of financialization. Much economic and IPE analyses essentially implied European vulnerability to a financial shock originating in American-driven processes of financialization, especially the massive market in mortgage-backed securities (MBS) with accompanying credit default swaps (Rajan, 2011; Shiller, 2008). They also stressed the centrality of the US-China relationship to the pre-2007 international financial system whereby a largely-unfinancialized China provided massive capital flows into US Treasuries and the US mortgage sector (Corden, 2009; Ferguson, 2009; Obstfeld and Rogoff, 2009; Thompson, 2010).

The literature that makes the US-China relationship central to the flows of capital into the United States prior to the crisis certainly has considerable explanatory force around the funding crisis at the GSEs, Fannie Mae and Freddie Mac (Thompson, 2009; 2010). Asian central banks' purchases of US Treasuries also served to reduce borrowing costs across the US economy (e.g., Warnock and Warnock, 2009; Bernanke et al., 2011). But if the crisis is structurally reduced to Asian capital flows into US assets, the problems facing European banks have to be the product of their participation in American-created MBS markets when this was not the case. As several researchers have shown, European banks were heavily involved in producing the MBS bubble (Bayoumi, 2017; McCauley, 2018). Moreover, MBS market weakness did not cause the crisis: rather the problems in MBS markets

acted in August 2007 as a trigger for the collapse of bank funding markets (Tooze, 2018, pp. 143-7, Thompson, 2016, p. 230).

Consequently, the crucial question for conceptualizing the crisis' structural origins has to be the underlying causes of what happened in bank funding markets. These problems were palpably at their most extreme in Europe, where reliance on financial markets for bank funding far exceeded that in the United States (IMF, 2010, pp. 67-8; Hardie et al., 2013, pp. 716-7; Thompson 2016, pp. 225-6). As section two will show, this was not a coincidence because the origins of the bank funding model that broke down in August 2007 lay in offshore dollar intermediation actively undertaken by European banks.

Despite European financialization's causal role in the crisis, neither the European states nor the European Central Bank (ECB) could provide the crucial tools needed to save European banks from the consequences of what these banks had created. The burden of providing liquidity fell on the Fed, as only the Fed could provide sufficient dollars when European banks lost access to dollar funding markets. This divergence creates a paradox with important implications for IPE in understanding international monetary and financial power dynamics.

European banks' massive need for dollar funding in 2007-9 arose from offshore dollar intermediation (McCauley, McGuire, and Sushko, 2015). As section two will show in detail, it was these offshore dollars intermediated primarily by European banks on behalf of both US and non-US actors in Eurodollar markets that were crucial to the entire international structure of bank funding that crashed during the crisis. Accordingly, the European banks' fate did not originate in a financialized order with structural dynamics established by the United States or in a Pacific balance of financial terror. Rather European banks, more than any other actors, created the internationalized banking world and its systemic crisis in which they suffered with no prospect of their own states protecting them. How they were able to construct a global bank funding system in the currency of the world's dominant monetary power is a crucial theoretical puzzle for IPE, as is the transformation of the Fed into the offshore LOLR backstopping banks globally by lending overwhelmingly to European banks, both in 2007-9 and through the 2011-12 Eurozone crisis.

2. Europe and the Financial Crisis

Analyzing the investment flows into the US shows European banks' importance to the crisis. The Asian and Middle Eastern surplus countries bought US\$1 trillion of US Treasuries and GSE bonds between 2003 and mid-2007, the period of peak inflows prior to the crisis. In the same period, Europe (overwhelmingly the euro area, the United Kingdom and Switzerland) bought US\$1.25 trillion of US corporate bonds, of which US\$475 billion were private label Asset-Backed Securities and some of the remainder were similar structured products (Bertaut et al., 2011, 33-34; see also Bernanke et al., 2011). Even without considering Foreign Direct Investment and investment in US equities, Europe was responsible for greater inflows into the United States than the Asian and Middle Eastern surplus countries.

European banks were strikingly active participants in purchasing alternative safe assets to US Treasury and GSE debt. They were not crowded out by Asian demand. Nor were they 'naïve investors'. Certainly, there were some naïve investors, like the German Landesbanks, among European banks (Lewis, 2010). But European banks were largely active and well-informed, if ultimately misguided, participants in MBS markets. Indeed, they were central to the chains involved in producing these 'quasi-safe assets', as the banking glut proponents make clear (e.g. Brender and Pisani, 2009; McCauley, 2018). A number paid large fines to the US authorities for miss-selling MBS. The now-infamous ABCP market – by the time of the crisis \$1.2 trillion in size and larger than the US Treasury bill market –, shows a geographic pattern inconsonant with a focus on US financial actors. Only 31 percent of outstandings were sponsored by US banks as of the beginning of 2007 (rising to 40 percent if all financial sponsors are included), with UK banks sponsoring 16 percent and euro area banks 46 percent. The risks inherent in these activities were taken by a wide range of European banks, borrowing and investing primarily in US dollars (Acharya and Schnabl, 2009, 55).

The claim of a substitution of potential European investment in US Treasuries and GSE debt with quasi-safe assets is similarly questionable. Small net European sales of US Treasuries from 2000 were more than balanced by increased investment in GSE debt, while investment in other debt securities across the range of credit ratings increased rapidly. It is this overall increase in investment that is most striking. The GSG thesis fails to recognize that the 'structural deficit of safe assets' resulted primarily from European banks' increased financialization. This, not a shortage of, or the low yields available on, US Treasuries and GSE debt, drove the demand for the US private-label MBS, which by 2005 exceeded MBS issued by the GSEs (McCauley, 2018, p. 40). As the credit bubble

approached its 2005-7 peak, European global banks increased their claims on US borrowers by 40 percent, far in excess of the amount that can be explained by any substitution (Shin, 2011, p. 16). At the centre of the crisis lay 'a European banking glut' (McCauley, 2018; see also Shin, 2011).

Put differently, European banks, from surplus and deficit countries, were the central players in financial globalization in the first years of this century. In early 2008, European banks' foreign assets in all currencies were over US\$30 trillion, 10 times the figure for American banks: '[n]etting out intra-euro area assets does not alter the order-of-magnitude difference' (Baba, McCauley and Ramaswamy, 2009, p. 66). Even in dollars, where US banks have long been seen as having a competitive advantage, the US dollar assets of non-US banks, at US\$10 trillion, equaled those of the US commercial banks (Shin, 2011). BIS reporting banks' foreign claims grew from end-2000 to mid-2007 from US\$11 trillion to US\$31 trillion; of this, European bank growth was particularly marked, and more than half this European growth was in non-euro assets (McGuire and von Peter, 2009, pp. 49-50). Cross-border banking by European banks expanded massively after the euro's creation, aided by European regulators adopting Basel II more enthusiastically than their US counterparts, and the fact that, unlike their US and Canadian counterparts, European banks did not have absolute limits on leverage (He and McCauley 2012, p. 40).

This facet of financial globalization involved European banks intermediating US dollar flows with counterparties not just in the US but globally. ABCP is mainly, though not exclusively,² 'round-tripping': lending from the US financing lending into the US (He and McCauley 2012). In terms of flows into the United States, Europe also intermediated flows from Asian and Middle Eastern surplus countries (McGuire and von Peter 2009; Bertaut et al., 2011, 10). The offshore US dollar market is not, however, primarily involved in intermediating flows that are either solely into or out of the US. Round-tripping increased markedly in the years leading to the crisis, thanks in part of ABCP. But most offshore US dollar intermediation involves flows between counterparties that are both outside the United States (Borio and Disyatat, 2011; Shin, 2011; He and McCauley, 2012). As of June 2010, 56 percent of offshore US dollar claims on non-banks were with non-US counterparties, as were 64

² For example, 37.7 percent of the assets of one programme, Ormond Quay, were from US borrowers (Acharya and Schnabl 2009; McDowell 2017).

percent of offshore US dollar liabilities (authors' calculations from He and McCauley, 2012, p. 39).

The Eurodollar market is global, but a substantial proportion is conducted by European banks.

In these activities, European banks were engaged in maturity transformation (Shin, 2011, p. 4), including on the US's behalf. Put differently, the US was outsourcing maturity transformation. Europe had become 'banker to the United States' as well as the leading source of dollar intermediation for non-US actors. With European bank balance sheets expanding markedly, they simultaneously performed both roles. This represents a substantial reversal from prior periods and the standard geographical narrative about financial globalization. The US was first labelled 'banker to the world' in the 1960s (Kindleberger, 1965; Depres, Kindleberger, and Salant, 1966). The US, it was then argued, borrowed short-term internationally in US dollars, and then lent long-term to the rest of the world, earning returns for doing so. Since then, the US external balance sheet has undergone substantial change, such that the label for the US has been updated to the world's venture capitalist (Gourinchas and Rey, 2005), insurer (Gourinchas, Rey and Govillot, 2010) or even hedge fund (James, 2009). However, these labels depend in large part on non-bank financial activities such as FDI and portfolio equity, and the United States as the recipient of US-dollar banking services has not received equal analytical attention.

The extent of the US dollar maturity transformation by European banks is not totally clear. Baba et al. (2009, p. 67) calculate the total need for dollar borrowing at US\$8 trillion, with the amount met by short-term borrowing likely to be at least \$2.1-2.3 trillion, including the off-balance sheet ABCP (McGuire and von Peter, 2009, p. 48). It is, however, clear that Europe's US dollar banking activities were underpinned neither by a central bank's ability to create US dollars nor by current account surpluses. Europe was running an aggregate small current account deficit in the years before crisis (Bertaut et al., 2011, p. 8; Shin, 2011, p. 5), with the euro area roughly balanced, and the UK in deficit. Instead, European banks relied disproportionately on a fragile mix of enormous volumes of market financing. US Money Market Mutual Funds (MMMF) invested around half their assets in non-US banks, the vast majority European (Baba et al., 2009; McDowell 2017). Their European counterparts provided a further US\$180 billion and central banks US\$380 (McGuire and von Peter, 2009). Interbank borrowing might have represented US\$400 billion (ibid.). Even those banks with secure euro- and sterling-denominated financing relied on the foreign exchange swap market to exchange those euros into US dollars (McGuire and von Peter, 2009, p. 53).

This fragility began to become apparent well before Lehman Brothers' bankruptcy. The problems in August 2007 at funds managed by France's largest bank, BNP Paribas, were arguably the financial crisis' first systemic act. German IKB Industriebank and Landesbank Sachsen and the UK's Northern Rock collapsed in August–September 2007, six months before even Bear Stearns' takeover by JP Morgan. European banks were also most dominant in borrowing from the Fed under the Term Auction Facility (established in December 2007 to provide liquidity to the banking system) in the period before the Lehman collapse (Shin, 2011, p. 22). This occurred, despite US MMMF increasing their investment in non-US banks as their own assets rose, on a misplaced flight-to-safety (Baba et al. 2009, p. 69). The run on the MMMF in September 2008 certainly exacerbated the problems, with non-US banks losing funding of US\$175 billion in just 11 business days, which the Fed essentially replaced (*ibid.*, p. 77). However, the MMMF continued to have half their (diminished) assets in foreign banks until the Euro area crisis became more acute in the first half of 2011 (Shin, 2011, p. 20). The European banks' dollar liquidity problems were spread across a range of markets, making any narrative that the Europeans were simply the innocent victims of a Lehman-induced run on irresponsible MMMF hard to sustain. These liquidity problems were also a leading cause of the dollar rally, one of the crisis' apparent puzzles (Allen and Moessner 2010, p.7). In sum, the crisis did not result in the long-feared withdrawal of Asian central bank investment from Treasuries and dollar depreciation, but rather in European banks' scramble for dollars and dollar appreciation (McCauley, 2018, p. 54).

3. *Why Europe matters for US monetary power*

For many, the Fed's becoming an international LOLR enhanced the US's centrality in the global financial system, reminding the world once again of the contribution of liquidity provision to US monetary power (e.g.. Helleiner and Kirshner, 2009; James, 2009; Schwartz, 2016; McDowell 2017). We argue here the opposite. The Fed's actions did demonstrate its crucial capacity to provide liquidity support for the financial system. However, seeing that capacity as in itself indicative of US monetary power ignores the relational nature of power (Dahl 1957; Baldwin 2013).³ In practice, offshore dollar credit creation in Europe constrained the United States' monetary autonomy and consequently reduced its power (Andrews 2006; Cohen 2015) relative to those European countries, even as it

³ The alternative capabilities approach is most commonly seen as originating in International Relations with Morgenthau (1948).

reinforced the dollar's commercial primacy. This constraint is the result of reduced US autonomy, which results in reduced power. As Cohen (2019, p.23, emphasis in original; see also e.g., Cohen 2006, 2015; Andrews 1994, p. 213; Vermeiren 2014) has argued, 'power must begin with autonomy, which generates a *potential* for leverage. Influence – the deliberate *activation* of leverage – should then be thought of as functionally derivative'. Autonomy is 'the essential foundation of power' (Cohen 2019, p.23). That liquidity provision had to be provided does not denigrate other sources of American monetary power (e.g., the efficacy of sanctions), but it nevertheless represents a significant overall diminution of that power.

The pre-August-2007 internationalized banking system run on European-created offshore dollars operated in part beyond the reach of US monetary influence. Notably, the Fed's monetary tightening from autumn 2004 to autumn 2006 did little to dampen credit conditions in the financial sector. Indeed, offshore dollar credit during that time grew faster than onshore dollar credit as the Fed increased US interest rates (McCauley, McGuire, and Sushko, 2015, p. 7). Then, from August 2007, the Fed was driven to large-scale currency swaps by conditions in the offshore US dollar money markets. When LIBOR, which was the effective offshore dollar interest rate, stopped following the Federal Funds Rate, the monetary measures the Fed undertook in response to bank funding pressures did not alleviate conditions in the offshore dollar credit markets. Through the next few months, Fed policy-makers became preoccupied with the wide spread between LIBOR and the Federal Funds Rate (Federal Reserve, 2007a; 2007b), concern compounded by the direct link between LIBOR and the interest rates on many US mortgages (McDowell 2017, pp. 159-60; McCauley 2018. pp.50-51). In December 2007, the Fed made its first move to provide dollar swap funding to the ECB and Swiss National Bank because, as Fed officials explained in an emergency conference of the Federal Open Market Committee (FOMC), there remained a high spread on LIBOR funding (Federal Reserve, 2007c, pp. 3-4).

Europe's financialization had therefore established, in Shin's words, 'a pivotal role for European banks in determining financial conditions in the United States' (2011, p. 9). In part, this was not a new development (Braun, Krampf and Murau, 2020). Central bankers in the late 1970s first recognized limits on US monetary policy via offshore dollar creation when they briefly contemplated controls on

banks' international lending, believing that this lending undermined the anti-inflationary effects of tightening monetary policy (Kaminska, 2016; Mayer, 1979). Nonetheless, the scale of offshore dollar creation, its dominance by European banks, and the level of interdependence between these banks and the US financial system changed dramatically during the pre-crisis years. This change was central to the loss of autonomy for the US and its loss of monetary power to financial actors, and ultimately, as we outlined below, to European states.

When offshore dollar funding markets began to break down in August 2007 the Fed saw little choice but to support European banks (see also McDowell 2017). Quite simply, no European central bank had the resources to cope; nor did the International Monetary Fund. Significantly, however, European central banks were also unwilling to contribute the dollar reserves they did have. While the Fed was the only entity capable of producing *unlimited* volumes of US dollars, it was not the only entity capable of supplying *any* US dollar liquidity. Undoubtedly, the market signals from a severe depletion of European reserves would have been very negative (Allen and Moessner 2010), but the use of some reserves (as occurred in Korea and Mexico) was viable. The peak volume of US dollars the ECB provided to its banks as a result of the swap lines was \$271.2 billion in October 2008, compared to total reserves then of US\$210.2 billion (*ibid.*, p.37).⁴ Yet the Europeans were not asked by the United States to utilize any reserves at all. As Bernanke explained to the FOMC at its monthly meeting in September 2008:

'Whether it's sensible or not, the ECB has made a pretty strong distinction with us between their foreign exchange reserves and their dollars that they use in these operations. They really want to keep those segregated. They want, to some extent, to represent this as being a collaborative effort with the United States as opposed to something they are taking on their own behalf. From their perspective ... they seem to put a lot of value on having a distinct swap line, which symbolizes the cooperation and coordination of the two central banks as opposed simply to using their own reserves (Federal Reserve, 2008c).

The large European banks had taken enormous risks that were blithely ignored by European governments. Nonetheless, the financial and political burden of responding to the crisis fell on the Fed, and the Fed obliged the Europeans without conditionality. In contrast, the ECB's own euro swap lines to Poland and Hungary required high-quality collateral, leaving both countries still dependent on

⁴ The BoE's position was worse, with peak US dollar liquidity provision approaching twice the level of reserves. William Poole, President of the FRB of St Louis, voted against swap lines for the ECB and the Swiss National Bank because of the level of their foreign exchange reserves (Broz 2015, p.12).

their own foreign exchange reserves (Allen and Moessner 2010). Nor was the ECB shy in setting conditions to the Fed. As McDowell (2017, p.166) notes, there was concern at the Fed regarding foreign bank branches continuing to have access to liquidity via the Fed's Term Auction Facility even as the swap lines were in operation. William Dudley, manager of the Fed's System Open Market Account, told colleagues that this was an ECB condition of accepting a swap line to avoid excessive blame. Put differently, the ECB was able to deflect some of the political costs of adjustment onto the Fed. Dudley's language is stark in terms of the choices facing the Fed: 'my judgment would be that we probably really didn't have a choice of getting dollars to those foreign banks through the ECB if we hadn't done the [TAF]' (FOMC 2008a, p.14). The ECB had made this 'more or less conditional' (ibid.), Continued access for European banks to the TAF also resulted in a cheaper source of funding than was available via European central banks' swap lines (Federal Reserve 2008b).⁵ Once the swap lines were established, the Europeans also shaped their usage to their own needs. The SNB used \$60 billion to buy assets from a Swiss bank, drawing on the liquidity facility to address solvency issues, 'outside the typical constraints of the swap lines' (Federal Reserve 2008b, p.37).

The Fed could not simply dictate the terms of the swap lines; they instead involved the 'compromise' forecast by Geithner (Federal Reserve 2007a, p.167). This was a compromise regarding the economic costs, but arguably the Europeans, in particular the ECB, were at least as concerned about the political costs: the ECB was 'less willing to do [and did not do] something in which they were taking responsibility for the problem' (Federal Reserve 2008a, p.15). The FOMC minutes are clear that the swap lines constituted a political problem. The Fed worried that it would be seen as 'subsidizing foreign banks' and 'bailing out the Europeans' and that this was 'not really a rational debate' (Federal Reserve 2007a, p.154). These political costs were a particular focus of discussions on to re-establish the swap lines in response to the euro area problems in May 2010: 'the political risks are tremendous' (Federal Reserve 2010). In making the case for providing dollar swaps to four non-European countries to his colleagues in the FOMC in October 2008, Timothy Geithner, then President of the Federal Reserve Bank of New York, was clear that the Europeans hardly met the criteria of sound economic management that ranked amongst the important formal requirements for support:

⁵ Geithner suggests this is something the Fed should look to ensure does not occur in future (Federal Reserve 2008b, p.26), so it is regarded as regrettable.

'We have the same basic interest that led us to be responsive to the European need in some cases. These guys are different in that they actually have managed the countries' balance sheets better because they at least have a huge amount of their assets in dollars. That should make us in some ways as comfortable as—maybe more comfortable than—doing it with the Europeans because they ran a banking system that was allowed to get very, very big relative to GDP with huge currency mismatches and with no plans to meet the liquidity needs of their banks in dollars in the event that we face a storm like this (Federal Reserve, 2008b).'

The Fed's liquidity provision to non-American banks from 2007 became, in Destais words (2014, p.1), 'a de facto key feature of the international monetary system' because once offered it became self-sustaining. In October 2013, the FOMC agreed to establish permanent swap facilities with five other central banks – three of which were European. At this FOMC meeting, the official who presented the case for establishing the swaps as a standing operation argued that it was necessary to 'reduce uncertainty among market participants as to whether and when these arrangements would be renewed' (Federal Reserve, 2013, p. 9). To all intents and purposes banks in the five states with permanent swap arrangements could with 'uncertainty' removed now engage in offshore dollar intermediation under the assumption the Fed is guaranteeing their liquidity (Murau, 2018, p. 6; Mehrling, 2015). Moreover, this move made imposing any conditionality problematic by reintroducing uncertainty as to liquidity availability in any future crisis (Allen and Moessner 2010, p.78).

Once the Fed acted to use 'its balance sheet as the global backstop' (Murau 2017, p.830), acute European constraints on US monetary power were visible. The Fed was clearly demonstrating its extraordinary capacity to provide a backstop, but it was equally clearly not demonstrating the autonomy necessary to exercise power. Any state whose banks had a dollar requirement that could systemically threaten dollar credit conditions could expect the Fed to oblige (Hardie and Maxfield, 2016, pp. 602-5). This reality is acknowledged in the formal Authorization for Foreign Currency Operations:

'Operations involving standing dollar liquidity swap arrangements and standing foreign currency liquidity swap arrangements shall generally be directed at countering strains in financial markets in the United States or abroad, or reducing the risk that they could emerge, so as to mitigate their effects on economic and financial conditions in the United States.' (Federal Reserve, 2018)

This framework established an overt hierarchy of access for states with European central banks at the top. Of the 2008-10 round of swap lines, Europe was counterparty for 95 percent of transactions by volume (authors' calculations from Federal Reserve undated). However, all systemically important

countries, and therefore the global system, benefited from the improvements in liquidity, even if they did not utilize the swap lines substantially. The first swap lines in December 2007 were only with the ECB and the Swiss National Bank. We must therefore see those countries or area – and because of its size principally the euro area – as the primary influence on the Fed's decision. Other developed economies, starting with the UK, Canada and Japan in September 2008, were added, benefiting from the precedent set.⁶ Some other important economies followed, but the Fed was by then trying to draw a line. In agreeing in October 2008 to extend dollar swaps to Singapore, South Korea, Mexico and Brazil, Nathan Sheets, a Fed economist, acknowledged to the FOMC that there was now a 'risk that approving these lines might cause us to be flooded with requests from other Emerging Market Economies (EMEs)', but insisted that 'we have set the bar quite high' in the justifications given such that 'few if any other EMEs [could] match' (Federal Reserve Board, 2008a, p. 11). The decisions on swap lines to EMEs have received considerable attention (e.g, Broz, 2015; Sahasrabuddhe, 2019). Nonetheless, the combined usage by the two EMEs that did utilize their lines, Korea and Mexico, were less than the utilization of either the Swedish Riksbank or the Danish Nationalbank.

Geopolitical considerations clearly influenced the decision on EMEs in ways that did not weigh with European requests. Bernanke noted the State Department had been involved in the discussion of which four non-European states to support and that there was a 'diplomatic perspective' as well as an 'economic perspective' (Federal Reserve Board 2008b, p. 16). The President of the Federal Reserve Bank of Dallas, Richard Fisher, justified the states chosen on the grounds that Mexico was a 'national security risk', Singapore was 'unique', Brazil was a 'critical part of our hemisphere' and Korea was 'inordinately successful'. (Federal Reserve, 2008b, p. 17). Sheets told the FOMC that the Fed had been approached by a number of other states that were rebuffed (Federal Reserve, 2008b; Prasad, 2014).⁷ In 2012 the Fed declined an entreaty from India (Steil 2014, p. 16; Sahasrabuddhe, 2019), even though Sheets had previously argued that 'the next one for which you could make a case would be India' (Federal Reserve, 2008b, p. 29). None of the requests rejected came from countries with systemically important financial systems. A small number of swap-line recipients were not systemically important either: New Zealand, for example. The US found itself taking 'actions to help

⁶ Also Australia, Denmark, New Zealand, Norway and Sweden.

⁷ Chile, Dominican Republic, Iceland, India, Indonesia, Peru and Turkey.

out its friends' (Cohen 2015, p. 183), but any actions helping non-systemic friends were inevitably small.

It is hard to avoid the conclusion that global systemic importance, and therefore importance to the US financial system, was what made the European requests an imperative, with other concerns, then at work in non-systemic non-European cases. The Fed also explicitly differentiated between the conditions attached to the primarily European 2007-8 dollar swap lines and those later extended to Singapore, South Korea, Mexico and Brazil. In the words of Sheets again, these 'safeguards [we]re designed to provide protections for Federal Reserve resources' (Federal Reserve, 2008b, p. 10).

In exercising selective discretion, the Fed was clearly exercising monetary power, underpinned by the autonomy which came from the lack of material negative consequences for the US economy of these actions. But power was exercised vis-à-vis a narrow group of non-systemic countries. It is important in any discussion of power to identify clearly the domain of power, or 'the number of other actors subject to its influence' (Baldwin 2013, p.275). For McDowell (2012, p.161), the Fed was demonstrating its ability 'to autonomously defend its own economic interests', but the evidence presented here in relation to European countries (and, indeed, in McDowell 2017) does not support a conclusion of autonomous action.

In this context, the decision to re-establish swap lines in May 2010, in response to the Eurozone crisis, is particularly important. This was a European crisis, erupting shortly after the initial swap lines had been closed in a belief that international US dollar liquidity concerns were over. The decision was made despite criticism of European policy: Bernanke called German fiscal policy 'a strange mind-set' (Federal Reserve 2010). As noted, the political risks were seen as 'tremendous'. For Bernanke, 'absent any political considerations, this would be a pretty easy call, in that it would support financial markets, both globally and in Europe, and would be an important indicator of solidarity'. (Federal Reserve 2010, p.6). The situation in American financial markets was different from that prevailing previous swap line decisions. This was pre-emptive, as 'U.S. institutions are still having success at funding themselves in U.S. markets' (ibid., p.10). Yet speaker after speaker uses the language of reduced autonomy: 'If we weren't to do this. I think things would just get worse, and we would be forced into doing it later' (Dudley); 'we need to be there if we can' (Kohn); 'none of us is happy with where we are' (Tarullo, criticizing EU policy); 'I'm really concerned that Europe is likely to be on fire by

our June meeting' (Evans); 'we need to provide dollars to make sure this doesn't unwind on us into a global disaster' (Hoenig). This immense fear forced the Fed to reverse the closure of the swap lines after only three months.

Of course, even if the decisions to institute swap lines suggest a loss of US autonomy, there is the structural possibility that the US government could have asked for other concessions in exchange for LOLR provision, supporting an argument for enhanced monetary power. There is, however, no discernible evidence that this additional power has been used in relation to individual European states or the Eurozone.

The Eurozone crisis did offer opportunities to make demands. It was a dual crisis, afflicting northern European banks that were acutely dependent on short-term dollar funding and held a large volume of assets in southern Europe and Ireland, as well as southern European and Irish sovereigns, banks and corporations. The peaks of each crisis in 2011 and 2012 ran along parallel lines such that when yields rose on periphery Eurozone bonds so did the dollar funding pressures on northern European banks (Thompson, 2016). In principle then American policy-makers could have asked for policy changes in exchange for dollar funding.

But expectations that the swap line decision 'is going to strengthen our hand for making some of the arguments we want to make' (Tarullo, Federal Reserve 2010, p.27) do not appear to have materialized. The clearest example of the inability of US policy-makers to impose their preferences on Eurozone policy-makers is the events in the second half of 2011. At this point, the ECB was simply unequipped to reduce periphery bonds yields with asset purchases and so improve the dollar-credit conditions facing European bonds, never mind provide sufficient dollar liquidity without Fed assistance. Between July 2010 and July 2011, the ECB had made few purchases under the only asset-buying program it had available, the Securities Markets Program (SMP) (Eser and Schwab, 2013, p. 12; Carrel, 2011). It began significant SMP purchases again in early August 2011 without stemming the growing pressure on Italian and Spanish yields. On September 17, US Treasury Secretary Geithner told EU finance ministers and officials that the Eurozone had to have a different policy, if necessary through strengthening the European Financial Stability Fund (EFSF), because the ECB's limited action under SMP was causing 'catastrophic' risks in financial markets (Quoted in Tooze, 2018, p. 404). The Eurozone finance ministers simply ignored Geithner, with the Commission

President reportedly dismissing even discussing Geithner's suggestion on the EFSF (Tooze, 2018, pp. 404-5). Meanwhile the Austrian finance minister felt sufficiently unconstrained to tell the press afterwards that the problem was the Americans because 'they have significantly worse data than the Eurozone' (Quoted in Chaffin, Barker and Hope, 2011). Indeed, rebuffing Geithner on the EFSF occurred despite the fact that Bernanke told the FOMC a few days later that the ECB itself 'seem[ed] intent on handing' the responsibilities for asset purchases 'over to the EFSF', so Geithner was not even introducing a new policy idea (Federal Reserve, 2011, p. 6). However, no consequences for Eurozone policy-makers followed. During that week – the week ending September 21 2011 - the ECB drew dollar swaps from the Fed worth \$575 million and the next week another \$500 million (Federal Bank of New York, 2014). At the FOMC on 20-21 September, an official briefed his colleagues as if the Fed were simply the passive recipient of the ECB's requests for financial resources:

'In response to the intensifying dollar funding strains for European institutions, the ECB, the Bank of England, and the Swiss National Bank announced that they would begin offering 84-day dollar funding operations in mid-October, using the liquidity swap lines that are in place with the Federal Reserve (Federal Reserve, 2011, p. 6).'

In the subsequent discussion the President of the Federal Reserve Bank of Boston described US dollar markets as 'hostage to European credit risk' (Federal Reserve, 2011, pp. 124-5).

Of course, we cannot say more than that there is presently no evidence that the US extracted side-payments from European states in exchange for the liquidity support provided. In addition, relations between the United States and the European Union are not what they were in 2011. For now, however, the evidence supports a view that the Eurozone and other European economies benefitted from support from 2007 to 2012 without conditionality because of the risks created for the United States by European banks' increased financialization, not a quid pro quo.

Europe Post-Crisis

If Europe's enfeebled banks were in retreat after 2008, the question arises as to whether the study of financial globalization prior to the 2020 financial crisis should re-pivot its attention back to the US and the US-East Asia relationship and/or consider Europe only in the context of the Euro's future (e.g., Cohen, 2012; Schwartz, 2012). Certainly, on some measures, it appears that the globalization of banking waned. Cross-border bank assets declined from 60 to 40 percent of global GDP in the

decade after the 2007-9 crisis, and the contraction of European banks' cross-border activities was the cause,⁸ while other nationalities' banks continued to increase international lending (McCauley et al., 2017). This might have proved 'a cyclical deleveraging of unsustainably risky bank balance sheets, rather than a secular de-globalization trend' (*ibid.*, 10). Nonetheless, too great a focus on this decline in European activity risks obscuring European banks' continued importance in financial globalization after 2008. US banks undoubtedly gained market share from their weakened European competitors, especially in investment banking. Nonetheless, US banks' foreign claims peaked in 2009, and even after a substantial post-2008 decline, UK bank foreign assets were very similar in size to those of US banks (although both are now behind the Japanese), with German and French banks not far behind (*ibid.*, p.8). As of the end of 2017, 'other investment assets' – the category made up almost exclusively of deposits and loans – of the euro area's external balance sheet totaled just under €5 trillion (43 percent of euro area GDP) and other investment liabilities totaled nearly €6 trillion (47 percent).⁹ The equivalent figures for the UK were £4.3 trillion and £4.0 trillion, and for the US US\$4.3 trillion and US\$5.5 trillion.¹⁰ European banks, for all their problems, still matter globally, and in particular still dominate the global US dollar system. The Fed remained 'on the hook' as a LOLR as long as European banks maintain these substantial US dollar liabilities (Broz 2015, p.32). The 2020 crisis provided this emphatically when the Fed followed its precedent in extending dollar liquidity beyond the permanent recipients to the states who previously received swap lines.¹¹

Our claims represent an implicit argument for a focus on gross flows and stock, not just net. However, for those who prioritize net flows and imbalances, changes after 2007-9 still suggest Europe played a crucial role in the ongoing offshore dollar problems exposed in 2020. An important change is that the euro area became the world's largest capital exporter (Claeys et al., 2017, p. 7), and Switzerland's increased surplus more than compensated for the increased UK current account deficit. The United States' current account deficit shrank post-crisis, but the United States remained the leading borrower. Official reserves fell globally, led by China (*ibid.*, p. 14), and the recycling of European surpluses were, as with intermediation, overwhelmingly by private sector actors, mainly banks.

⁸ Euro area, UK and Swiss bank cross-border claims declined by US\$9.5 trillion 2007-16, while those of other regions increased (McCauley et al., 2017, p. 9).

⁹ Source: ECB.

¹⁰ Source: ONS, BEA.

¹¹ The permanent recipients were the euro area, the UK, Switzerland, Canada and Japan, with Australia, Brazil, South Korea, Singapore, Sweden, Denmark, Norway and New Zealand again added.

In sum, the US dollar's international use in financial markets is mainly completely outside the US, and yet must concern the Fed because it potentially impacts US monetary conditions. Despite European banking contracting, this dollar activity only rose after the 2007-9 crisis, increasing 50 percent by 2014 to US\$9 trillion (McCauley, McGuire and Sushko, 2015). An increased amount of this was bonds rather than bank loans, but European dominance continues (*ibid.*). The connections between financial markets, Europe's increased importance in U.S. bond markets,¹² and banks' centrality in all European financial systems means that the incentives for the Fed to remain the LOLR for offshore dollar banking arising from European banks' vulnerability were obvious even before the 2020 crash.

4. Conclusions

Offshore dollar credit intermediation in Europe was a fundamental structural context in which the 2007-9 financial crisis occurred. European financialization was therefore a structural cause of the 2007-9 financial crisis. Europe supplied a crucial part of the investment in the United States' mortgage markets. European banks were also central to the chains that produced 'quasi-safe assets'. In engaging in maturity transformation, European banks became a 'banker to the United States'. European banks were central to the crisis in offshore dollar credit markets that began in August 2007, precipitating an impossible search by banks for dollars. Despite some retrenchment by European banks from their international activities after 2008, a fundamental financial interdependence between the United States and Europe remained in place, including in relation to European holdings of US securities. These developments arose out of the history of Eurodollar markets and the incentives for banks established by the EU's creation of the Eurozone. There can be no coherent history of financial globalization that does not give European banks and European states a central structural role.

The policy response to the 2007-9 crisis generated by this European-made financial system produced a shift in the international monetary and financial order via the emergence of the Fed as an in principle global LOLR that in practice in its actual lending was overwhelmingly directed towards Europe. This development strengthened American monetary power where the US economy has the autonomy necessary for the Fed to exercise discretion in providing its resources. Crucially, however,

¹² European investment in U.S. bonds increased by over \$1 trillion, 2008-2016.

this autonomy does not apply to the major European states. The Fed had to become a LOLR to Europe because the Fed's ability to use monetary policy to shape domestic credit conditions weakened. Moreover, the Fed appears to have absorbed the consequences of the extreme risks run by European banks without extracting concessions, even as the Eurozone authorities' inability to stabilize periphery bond markets continued to threaten US credit conditions.

The dominant approaches in IPE were not well geared towards analyzing the actual fault lines in the pre-2007-9 crisis international economy and their system-level dynamics (Cohen, 2009; 2017), including offshore dollar creation. Although the systemic risks around offshore dollar banking imposed again in 2020, post-2007-9 crisis scholarship remained largely detached from systemic-level issues in the real world. (Cohen, 2017: Drezner and McNamara, 2013). If, as Drezner and McNamara (2013, p. 156) argue 'IPE must explain the generation and transformation of global financial orders', the international monetary and financial world created by European financialization driven by European banks must be central to the disciplinary understanding of a world economy that requires the Fed to provide massive dollar liquidity abroad.

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